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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/087,731 | 03/05/2002 | Nobusige Arai | 2936-0151P | 1577 |
| 2292 | 7590 | 04/13/2004 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | STINSON, FRANKIE L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1746 | |

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,731

Applicant(s)

ARAI ET AL.

Examiner

FRANKIE L. STINSON

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-28 and 35-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5,19-23,35,39 and 45 is/are rejected.
- 7) ☒ Claim(s) 6,37,38,40-44 and 46-50 is/are objected to.
- 8) ☒ Claim(s) 7-18,24-28,35,36 and 51 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/5/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. Claims 7-18, 24-28 35, 36 and 51 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper filed February 20, 2004.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiss in view of Zweig.

Re claim 1, Hiss discloses a washing machine (100) having a partial washing apparatus (120) that removes dirt from an article to be washed wherein the partial washing apparatus is to be fitted to the washing machine movable between an in-use position in which the partial washing apparatus is placed when in use and a not-in-use position, different from the in-use-position, in which the partial washing apparatus is placed when not in use that differs from the claim only in the recitation of the partial washing apparatus washing by means of supersonic vibration. Zweig is cited disclosing in a washing machine, the arrangement of a partial washing apparatus (100) washing by means of supersonic vibration (see col. 9, lines 43-56). It therefore would have been obvious to one having ordinary skill in the art, to modify the partial washing apparatus of

Hiss, to wash by means of supersonic vibration as taught by Zweig, for the purpose of enhancing the washing process.

4. Claims 5, 19, 23, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 4-224793 (Japan'793) in view of either Hortel et al. Japan 10-128175 (Japan'175).

Re claims 5 and 19, Japan'793 is cited disclosing a washing machine having a washing tub, a partial washing apparatus (see fig. 2) that removes dirt from the article to be washed by means of sonic vibration, wherein the partial washing apparatus is a supersonic resonator for generation supersonic vibration that differs from the claims only in the recitation of the supersonic horn for amplifying the vibrations. Hortel, and Japan'175 are both cited disclosing the notoriously well-known concept of providing a horn, for amplifying sonic vibrations. It therefore would have been obvious to one having ordinary skill in the art to modify the device of Japan'793, to include a horn as taught by either Hortel or Japan'175, for the purpose of amplifying the vibration in Japan'793, thereby intensifying the cleaning process. Also with respect to claims 19 note that Hortel disclose the use of water that has solvent and surfactants added thereto (see col. 2, lines 47-50). Re claim 23 Japan'793 disclose the ultrasonic vibrating horn as proposedly modified. Re claim 35, Japan'793 discloses the feeding of the washing liquid to the partial washer.

5. Claim 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan'793 in view of either Hortel et al. or Japan'175 as applied to claims 5 and 19 above, and further in view of Rose.

Claims 20-23 define over Japan'793 only in the recitation of the water being electrolyzed, soften or deaerated. Rose discloses the softening of the water. It therefore would have been obvious to one having ordinary skill in art to modify the waster in the tub in Japan'793, to be areated as taught by Rose, for the purpose of enhancing the washing process. Furthermore, no patentably distinction is deemed exist in that the water treatment means are functional equivalents of each other and would be readily interchangeable (see MPEP 22144.06 "SUBSTITUTING EQUIVALENT KNOWN FOR THE SAME PURPOSE").

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 45 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Miyazaki.

Re claims 45, note that Miyazaki is cited disclosing an apparatus comprising a supersonic wave generator, a supersonic horn (8) for amplifying supersonic vibration, the horn having a slit (as at 23) formed in the lower portion thereof, so as to permit an article being treated to be inserted therein. Please note that the preamble has not been afforded the weight of a limitation in that the body fails to recite any structure to limit the apparatus for washing only (see MPEM 2111.02).

8. Claims 6, 37-44 and 46-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Levan, Japan'761, Japan'093, Japan'711, Japan'458, Collins, Yarmosky, Japan'918. Olsen et al., Vonpless, Hildebrandt, Kezer, Jung Jr., Japan'792, and Levan et al., note the cleaning means.

10. It should also be noted that a copy of reference H-324081 as listed on PTO Form 1449, be included in applicant's response in the the examiner was unable to obtain a copy from the available sources.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached M-F from 5:30 a.m. to 2:00 p.m. and some Saturdays from 5:30 a.m. to 11:30 a.m.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to TECHNOLOGY CENTER 1700 (571) 272-1700.

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Any inquiry for missing parts of this Office Action (copies of references, pages, forms etc.), contact the TEAM LEADER Ms. Nicol Scott (571) 272-1045.

fls



FRANKIE L. STINSON
Primary Examiner
Art Unit 1746